

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: BEAN POND	Lake Area (ha):	4.17
Town: OSSIPEE	Maximum depth (m):	10.9
County: Carroll	Mean depth (m):	4.3
River Basin: Saco	Volume (m ³):	178500
Latitude: 43°45'35" N	Relative depth:	4.8
Longitude: 71°14'00" W	Shore configuration:	1.24
Elevation (ft): 1325	Areal water load (m/yr):	5.69
Shore length (m): 900	Flushing rate (yr ⁻¹):	1.30
Watershed area (ha): 44.3	P retention coeff.:	0.63
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

20 February 1992

22 July 1991

DOM. PHYTOPLANKTON (% TOTAL)	#1	RHIZOLENIA 60%	UROGLENOPSIS 55%
	#2	DINOBRYON 20%	PERIDINIUM 25%
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			2225
CHLOROPHYLL-A (µg/L)			4.17
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 62%	KERATELLA 27%
	#2	POLYARTHRA 25%	CONOCHILUS 14%
	#3		
ROTIFERS/LITER		153	72
MICROCRUSTACEA/LITER		0	30
ZOOPLANKTON ABUNDANCE (#/L)		157	105
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			3.6
BOTTOM DISSOLVED OXYGEN (mg/L)		2.0	0.5
BACTERIA (fecal col., #/100 ml) #1			< 10
	#2		< 10
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m):	4.0
Hypolimnion volume (m ³):	24000
Anoxic volume (m ³):	26500

CHEMICAL:

Lake: BEAN POND

Town: OSSIPEE

	20 February 1992		22 July 1991		
DEPTH (m)	3.0	6.0	2.5		7.5
pH (units)	5.7	5.7	6.6		6.0
A.N.C. (Alkalinity)	2.2	2.4	2.0		3.8
NITRATE NITROGEN	< 0.02	0.02	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN					
TOTAL PHOSPHORUS	0.008	0.005	0.008		0.019
CONDUCTIVITY (μ mhos/cm)	20.4	20.6	17.9		24.4
APPARENT COLOR (cpu)	19	21	18		38
MAGNESIUM			0.23		
CALCIUM			1.3		
SODIUM			1.2		
POTASSIUM			0.50		
CHLORIDE	< 3	< 3	< 2		< 2
SULFATE	4	4	3		2
TN : TP					
CALCITE SATURATION INDEX			4.3		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1991

D.O. S.D. PLANT CHL TOTAL CLASS

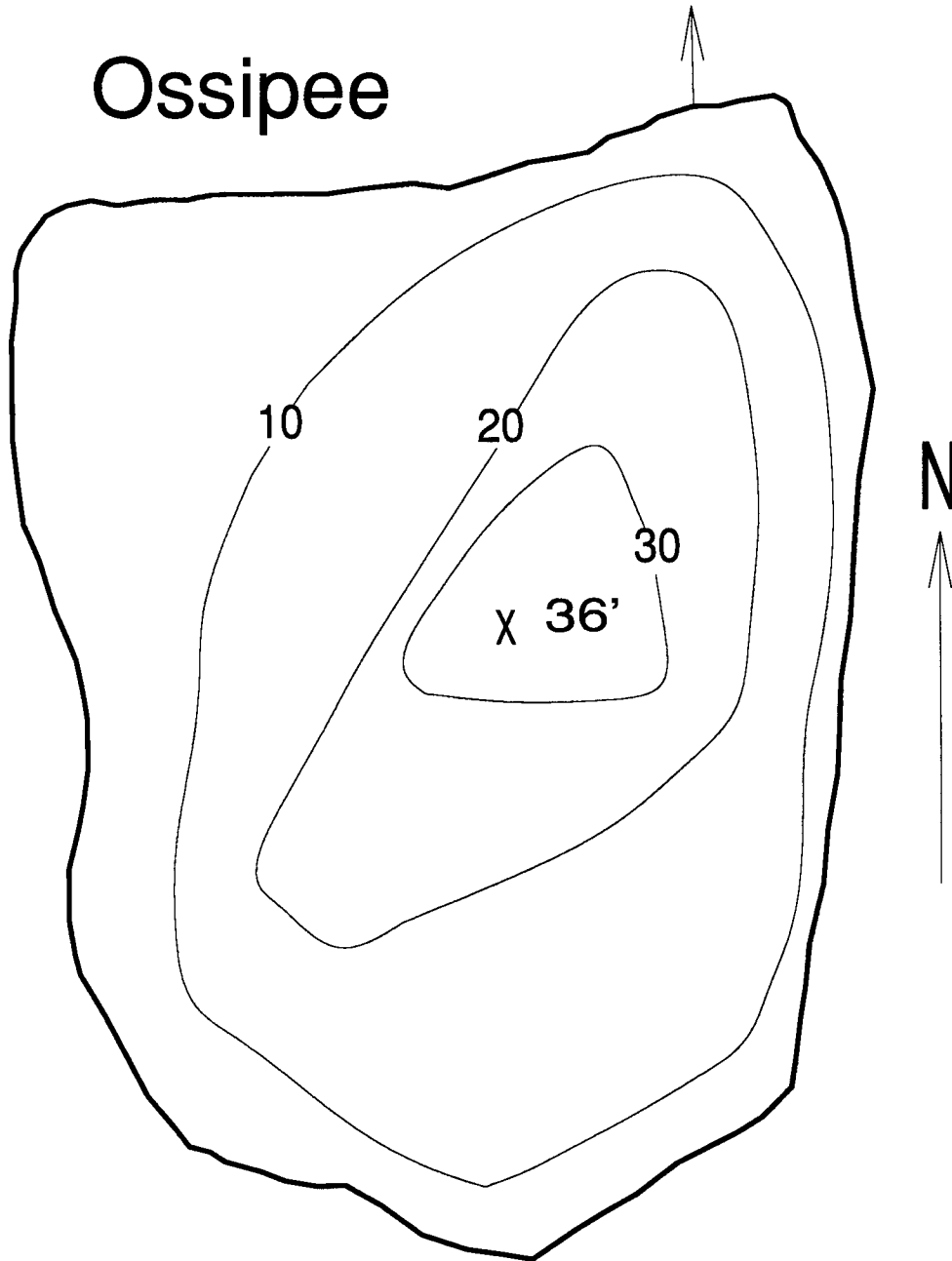
6	2	1	1	10	Meso.
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COMMENTS:

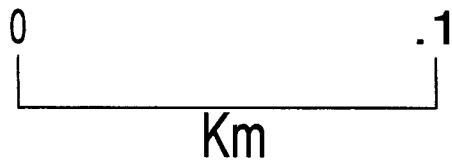
1. This is a remote pond that was surveyed cooperatively with the N.H. Fish and Game Department.
2. The pond level was down 2 to 3 feet because of disrepair of the beaver dam. There was much timber down in and around the edge of the pond due to beaver activity.
3. Blue-greens (70%) were the dominant class of wholewater plankton with Merismopedia (70%) the dominant genera.

Bean Pond

Ossipee



10 foot depth contours



[illegible]

COMMENTS :

***Dissolved oxygen values are in mg/L**

[illegible]

AQUATIC PLANT SURVEY

LAKE: BEAN POND	TOWN: OSSIPEE	DATE: 07/22/91
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TOWN: OSSIPEE

DATE: 07/22/91

[illegible]

OVERALL ABUNDANCE: Scattered	
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GENERAL OBSERVATIONS:

1. Although not depicted on the map, bladderwort and pondweed were observed over most of the visible bottom. It may be over much of the pond bottom.
2. The overall rating is primarily for the emergent plants and not for the plants along the bottom.